

NOV 01 2011

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT  
ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)**

Docket Number (Optional)

First named inventor: FRED A. VACCARI and G. GENTILEApplication No.: 10/597680Art Unit: 3736Filed: APRIL 27, 2007Examiner: DIANE GOODWYNTitle: ELECTRONIC SAFETY DEVICE FOR  
SPORT HELMET

Attention: Office of Petitions

**Mail Stop Petition**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

FAX (571) 273-8300

NOTE: If information or assistance is needed in completing this form, please contact Petitions  
Information at (571) 272-3282.The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the  
United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set  
for reply in the office notice or action plus any extensions of time actually obtained.**APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION**

NOTE: A grantable petition requires the following items:

- (1) Petition fee;
- (2) Reply and/or issue fee;
- (3) Terminal disclaimer with disclaimer fee - required for all utility and plant applications filed  
before June 8, 1995; and for all design applications; and
- (4) Statement that the entire delay was unintentional

**1. Petition Fee**☒ Small entity-fee \$ 810.00 PAID SEPT 19, 2011 (37 CFR 1.17(m)). Application claims small entity status. See 37 CFR 1.27.☐ Other than small entity-fee \$ \_\_\_\_\_ (37 CFR 1.17(m))**2. Reply and/or fee**

A. The reply and/or fee to the above-noted Office action in

the form of RESPONSE & RENEWED PETITION (identify type of reply):☒ has been filed previously on DEC 21, 2009 & SEPT 19, 2011☒ is enclosed herewith.

B. The issue fee and publication fee (if applicable) of \$ \_\_\_\_\_.

☐ has been paid previously on \_\_\_\_\_.☐ is enclosed herewith.

(Page 1 of 2)

This collection of information is required by 37 CFR 1.137(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## 3. Terminal disclaimer with disclaimer fee

☒ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.

☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ \_\_\_\_\_ for a small entity or \$ \_\_\_\_\_ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. [NOTE: The United States Patent and Trademark Office may require additional information if there is a question as to whether either the abandonment or the delay in filing a petition under 37 CFR 1.137(b) was unintentional (MPEP 711.03(c), subsections (III)(C) and (D)).]

**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

*George A Rolston*  
Signature

GEORGE A ROLSTON  
Type or Printed name

45 SHEPPARD AVE E. # 900  
Address

TORONTO, ONTARIO, CANADA M2N5W9  
Address

OCT 25 2011  
Date

U.S. 20535  
Registration Number, If applicable

416-489-2277  
Telephone Number

Enclosures:

☒ Fee Payment PROOF OF PAYMENT

☒ Reply

☐ Terminal Disclaimer Form

☐ Additional sheets containing statements establishing unintentional delay

☒ Other: PROOF OF PREVIOUS FILINGS & RESPONSE

**CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]**

I hereby certify that this correspondence is being:

☐ Deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Petition, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

☐ Transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (571) 273-8300.

\_\_\_\_\_  
Date

\_\_\_\_\_  
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\_\_\_\_\_  
Typed or printed name of person signing certificate

THE U.S. PATENT OFFICE  
Petition to Revive unintentionally abandoned application

September 13, 2011

**COPY**

In Re: U.S. Patent Application  
Serial No: 10/597680  
Filing Date: April 27, 2007  
Title: ELECTRONIC SAFETY DEVICE FOR SPORT-HELMET  
Inventor: Fred A. Vaccari and G. Gentile  
Examiner: Brian Szmaj Ph: 1-571-272-4733  
Art Unit: 3736 Fax 1-571-273-8300  
Our file No: 1367U101

The Commissioner of Patents  
PO Box 1450,  
ALEXANDRIA,  
VA 22313-1450 U.S.A.



Dear Sir/Madam:

This is in regards to the above noted Patent Application.

1. An office action was received dated October 13, 2009. Deadline was January 13, 2010
2. On December 21, 2009 we responded to office action. A copy is attached
3. A replacement Power of Attorney was filed appointing ourselves.
4. On November 24, 2010, we received a Notice of Acceptance of Power of Attorney.
5. Apparently this application was abandoned in May 2010, however we have not received any Notice of Abandonment and since we received the Notice

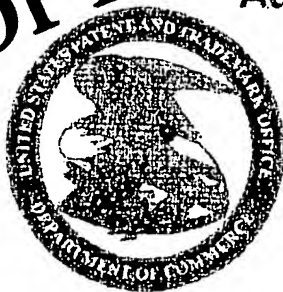
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# Auto-Reply Facsimile Transmission

TO:

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### Fax Information

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Received  
Cover  
Page

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Doc-11-05 09:50 AM G. RILEYTON 212 499 2752 P. 01

File No. :

**IN THE UNITED STATES PATENT AND TRADE MARKS OFFICE**  
**RESPONSE** File 1367U101

In Re: Patent Application

Serial No: 10657860

Filing Date: April 27 2007

Title: ELECTRONIC SAFETY DEVICE FOR SPORTS HELMETS

Inventor: Fred A. Vaccaro et al

Examiner: Brian Szmal P: 1 571 272 4733

Supervisor: M Hindenburg 1 571 1272 4726

Art Unit: 3738 Fax 1 571 273 8300

Office Action dated: October 13 2008 Deadline: January 13 2010

The Commissioner of Patents  
PO Box 1450,  
ALEXANDRIA,  
VA 22313-1450 U.S.A.  
Dear Sir/Madam:

In response to the above-noted Office Action.

A substitute appointment, naming George A Raison, has been filed, together with the corporate information requested by the Office.

Kindly confirm safe receipt. Kindly amend this application as follows:

IN THE SPECIFICATION:

Delete para 0128:

And insert:

- 1 -

FILED PATENT AT 10/13/2008 BY G. RILEYTON 212 499 2752 P. 01

**COPY**



File No.: *13674101*

**IN THE UNITED STATES PATENT AND TRADE MARKS OFFICE  
RESPONSE file 1367U101**

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In Re: Patent Application

Serial No: ~~10/597880~~ *680*

Filing Date: April 27 2007

Title: ELECTRONIC SAFETY DEVICE FOR SPORTS HELMETS.

Inventor: Fred A. Vaccari et al

Examiner: Brian Szmal Ph 1 571 272 4733

Supervisor; M Hindenburg 1 571 ~~272~~ 4726

Art Unit: 3736

Fax 1 571 273 8300

Office Action dated: October 13 2009      Deadline; January 13 2010

The Commissioner of Patents

PO Box 1450,

ALEXANDRIA,

VA 22313-1450 U.S.A.

Dear Sir/Madam:

In response to the above-noted Office Action.

A substitute appointment, naming George A Rolston , has been filed, together with the corporate information requested by the Office.

Kindly confirm safe receipt. Kindly amend this application as follows:

IN THE SPECIFICATION:

Delete para 0029:

And insert

[0029] In some embodiments, the position sensor 15 is operable to sense a tilt angle relative to a vertical axis extending from a straight spine of a wearer of a helmet including an electronic safety device 10. That is, the position sensor 15 is operable to sense how far forward and/or backward the head is relative to the body of the wearer. Referring to FIG. 2, and with continued reference to FIG. 1, in some specific embodiments the position sensor 15 is a photo-interrupter 20 that is operable to sense tilt past a threshold angle (e.g. 70°) relative to a vertical axis (e.g. extending from a substantially straight spine, when the participant is standing upright). When the head tilts forward past the threshold angle the photo-interrupter 20 outputs a voltage level change that is received by the processor 11 that in turn determines whether or not the head has been tilted past the threshold angle for a predetermined duration, as will be described in more detail below with added reference to FIG. 5. ~~Suitable alternate sensing devices may include a piezo element and/or Hall Effect switch in combination with a moving object such as a steel ball or gravity sensitive switch.~~ In view of this description and the examples presented herein, those skilled in the art are expected to be able to substitute in other suitable sensing devices to achieve the desired result.

**IN THE CLAIMS;**

**Amend claims 1 to 20 as shown in attached claims listing.**

**REMARKS:**

The rejection of this application in the above noted Office Action is respectfully traversed.

#### CLAIM OBJECTIONS.

The undersigned wishes to thank the Examiner for his careful observations, and acknowledges the various informalities noted .

These have now been corrected. Several more typos in the claims have also been dealt with.

35 USC 102.

This objection is based on SOCCI '181. It is applied only to claims 1 to 7, and 9 to 16 and 18 to 20.

There is no 102 objection to claim 8, or claim 17 .

It is believed that the claims as filed would have distinguished over 181.

The original claim 1, claimed in para b , that the processor determines whether the head has been in an unsafe position for a certain length of time.

Socci 181 does not provide this function.

However it is believed that in view of the amendments now made, and discussed below, still further distinctions are present defining claim 1 over Socci 181.

Claim 1 , Claim 11 and all remaining dependant claims are now believed to be free of the 102 objection.

35 USC 102.

This objection is based on Socci '168 and applied to the same claims as above

The response to the above objection has already been explained above.

The same observations apply to 102 objections based on 168.

Claim 1 as filed is believed to distinguish over 168 .

Claim 1 and Claim 11 and dependent claims as amended are believed to still further distinguish over 168 . Reasons are discussed below

35 USC 103

This objection is based first of all on Socci 181 coupled with Lee 91001, and secondly on Socci 168 coupled with Lee 91001.

This objection is applied only to claim 8 .

Claim 8 was dependent on Claim 1

Claim 8 claimed a selection of one of three elements, namely

1. a photo interrupter.
2. or a piezo element .
3. or a hall effect switch .

None of these were disclosed in Socci 181 or in Socci 168.

Lee discloses only the piezo element (item 2 above).

Lee does not disclose a photo interrupter, (item 1 or a hall effect switch (item 3).

Accordingly it is believed that either of these two elements , when added to claim 1 and to claim 11, provide a clear line of distinction over either combination of references.

35 USC 103

Claim 17 is objected to based on Socci 181 coupled with Tilley 206609.



Tilley provides an electronic timer, and a photoelectric switch responsive to ambient light. This simply switches the system on or off.

However Tilley does not disclose either of the two elements referred to above and claimed in claim 8, namely,

A photo interrupter, (item 1) or a hall effect switch. (item 3)

Claim 1 is now amended to incorporate new para b,  
a limitation to A PHOTO INTERRUPTER INCORPORATED IN THE SENSOR.

Claim 11 is amended in the same sense.

These claims clearly distinguish over Socci 181 coupled with Lees, and/or Socci 168 coupled with Lees, and/or Socci 181 coupled with Tilley, on this basis .

Old claim 15 is now amended to depend from Claim 11.

Claim 3 to 7, and 19 and 20 are cancelled.

Reconsideration and allowance is earnestly solicited in view of the foregoing. In the event that the Examiner feels that a discussion of the case would be helpful it is respectfully requested that he call the undersigned at the telephone number noted below. It is helpful if the Examiner can quote the attorney docket number and applicant's name.

Yours respectfully,

Fred A. Vaccari et al

Attorney Docket Number 1367U101

Per

*George A Rolston*  
**GEORGE A ROLSTON**  
PATENT AND TRADE MARK AGENT  
U.S. REG 20,535, CAN. 2439

*Dec 21 2009*  
45 Sheppard Avenue East Suite 900,  
Toronto ON Canada M2N 5W9  
416 489 2277

Claims listing 10/597,680 Vaccari et al our file 1367U101 Dec 21 2009

1. (currently amended) An electronic safety device, for use in a sport-specific helmet for protecting the head of a first participant of an impact-sport, comprising:

(a) a position sensor for sensing the position of the head of the first participant and providing a signal indicative of the sensed head position;

(b) a photo interrupter incorporated in said position sensor and being operable to sense a tilt of the head of the first participant beyond a threshold angle relative to the vertical;

(b) (c) a processor connectable to the position sensor for receiving the signal indicative of the sensed head position, the processor determining if the head of the first participant has been in an unsafe position for a first continuous duration of time, and producing a signal qualifying the determination; and

(c) (d) an indicator connectable to the processor for receiving the signal qualifying the determination, and subsequently indicating that the head of the first participant is in an unsafe position.

2. (previously presented ) An electronic safety device according to claim 1 further comprising an activator for switching the electronic safety device between an active mode, in which the electronic safety device operates to monitor of the head position of the first participant, and a standby mode, in which the electronic safety device does not monitor of the head position of the first participant.

3. , 4, 5, 6 , 7 CANCELLED

8. (currently amended) An electronic safety device according to claim 1, ~~wherein the position sensor includes at least one of a photo interrupter,~~

including a piezo element operable to create an alarm and a hall-effect switch.

9. (currently amended) An electronic safety device according to claim 1, wherein the indicator includes at least one of the of a group comprising an audible indicator, a visual indicator and a vibration indicator.

10. (previously presented ) An electronic safety device according to claim 1, wherein the processor further determines if the head of the first participant has been in an unsafe position for a second continuous duration of time, which is longer than the first continuous duration of time, and producing a signal for the indicator to stop indicating if the head has been in the unsafe position for the second continuous duration of time.

11. (currently amended) A method, for warning at least one of a first and second ~~participants~~ participant of an impact-sport that the head of the first participant is in an unsafe position, said first participant wearing a sports helmet with an electronic safety device having a photo interrupter incorporated in a position sensor and being operable to sense a tilt of the head of the first participant beyond a threshold angle relative to the vertical;

comprising:

(a) sensing an unsafe head tilt of the first participant beyond a threshold angle by means of said photo interrupter incorporated in said position sensor, said photo interrupter being operable to sense a tilt of the head of the first participant beyond a threshold angle relative to the vertical;

;

(b) determining if the sensed unsafe head tilt has been maintained for at least a first continuous duration of time; and

(c) indicating to one of the first and second participants that the head tilt of the first participant is unsafe.

12. (currently amended) The ~~A~~ method according to claim 11 further comprising stopping the indicating after a second continuous duration of time.

13. (currently amended) The ~~A~~ method according to claim 11 further comprising stopping the sensing, determining and indicating after a second continuous duration of time.

14. (currently amended) The ~~A~~ method according to claim 13 further comprising re-starting the sensing, determining and indicating after a third continuous duration of time.

15. (currently amended) The ~~A~~ method according to claim 11 ~~for operating electronic safety device, for use in a sport specific helmet adapted to protect the head of a first participant of an impact sport, the method~~ and further comprising:

(a) determining whether or not the electronic safety device is in use; and

(b) ~~one of~~ switching on and maintaining an active mode for the electronic safety device, if it is determined that the electronic safety device is in use.

16. (currently amended) The ~~A~~ method according to claim 15 further comprising ~~one of~~ switching off and maintaining a standby mode for the electronic safety device, if it is determined that the electronic safety device is not in use.

17. (currently amended) The ~~A~~ method according to claim 15, wherein the step of determining whether or not the electronic safety device is in use includes a determining if sufficient ambient light is being received from ~~he~~ the surrounding environment.

18. (currently amended) The ~~A~~ method according to claim 15, wherein the step of determining whether or not the electronic safety device is in use includes a determining if the electronic safety device is in motion.

19. AND 20 CANCELLED